

```
# Priority Queue using List
```

```
pq = []
```

```
while True:
```

```
    print("\n1. Insert")
```

```
    print("2. Delete")
```

```
    print("3. Display")
```

```
    print("4. Exit")
```

```
    ch = int(input("Enter choice: "))
```

```
    if ch == 1:
```

```
        e = input("Enter element: ")
```

```
        p = int(input("Enter priority: "))
```

```
        pq.append((p, e))
```

```
        pq.sort()
```

```
        print("Element inserted")
```

```
    elif ch == 2:
```

```
        if pq:
```

```
            print("Deleted:", pq.pop(0))
```

```
        else:
```

```
            print("Queue empty")
```

```
    elif ch == 3:
```

```
        if pq:
```

```
            for i in pq:
```

```
                print("Element:", i[1], " Priority:", i[0])
```

```
        else:
```

```
            print("Queue empty")
```

```
    elif ch == 4:
```

```
        break
```

```
    else:
```

```
        print("Invalid choice")
```

Output:

1. Insert

2. Delete

3. Display

4. Exit

Enter choice: 1

Enter element: A

Enter priority: 2

Element inserted

1. Insert
2. Delete
3. Display
4. Exit

Enter choice: 1  
Enter element: B  
Enter priority: 1  
Element inserted

1. Insert
2. Delete
3. Display
4. Exit

Enter choice: 3  
Element: B Priority: 1  
Element: A Priority: 2

1. Insert
2. Delete
3. Display
4. Exit

Enter choice: 2  
Deleted: (1, 'B')

1. Insert
2. Delete
3. Display
4. Exit

Enter choice: 4